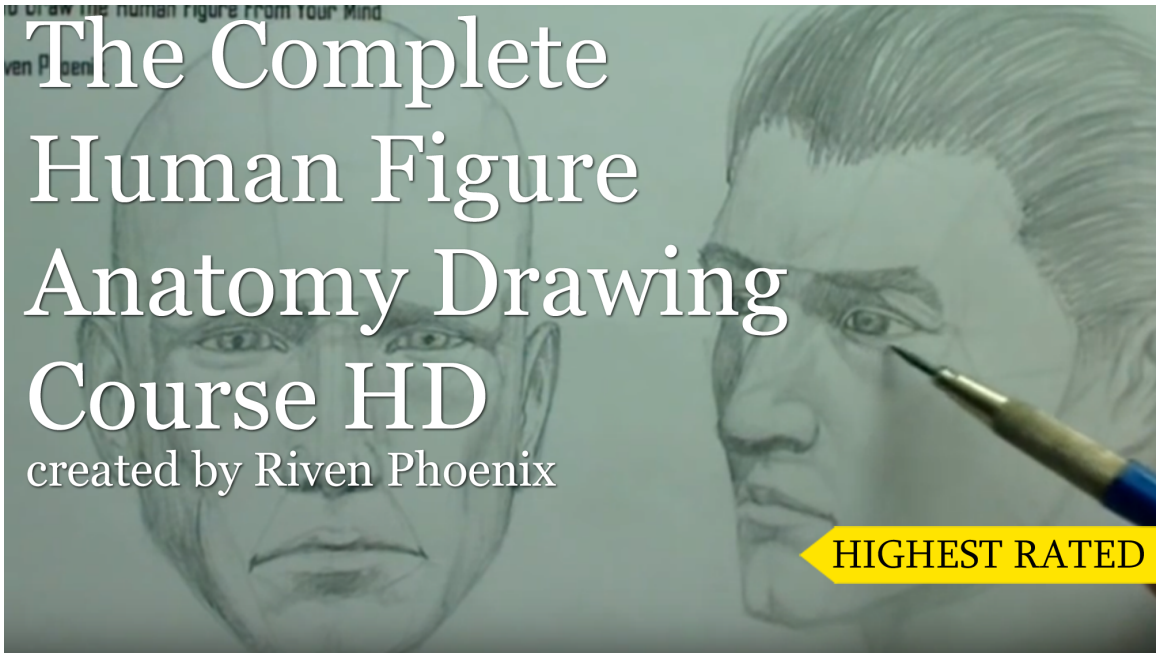

The Structure of Man

Learn to Draw the Human Figure From Your Mind with Riven Phoenix

www.alienthink.com

Figure Drawing Lesson 063 - Formulas for Front & Back view of Radius and Ulna

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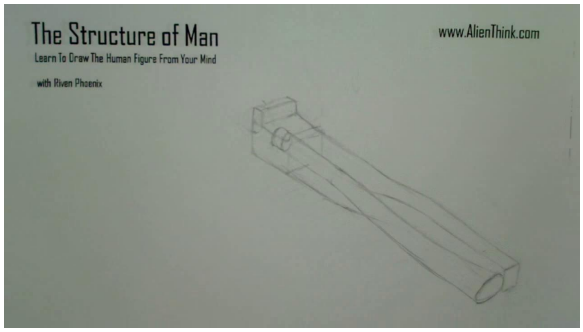
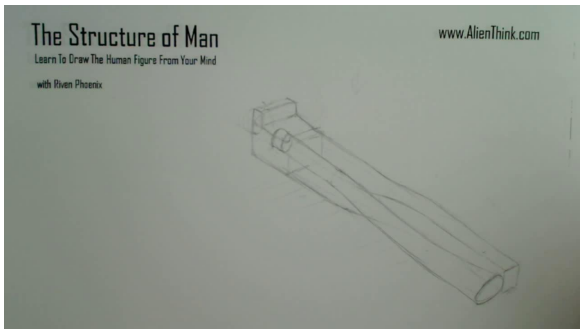
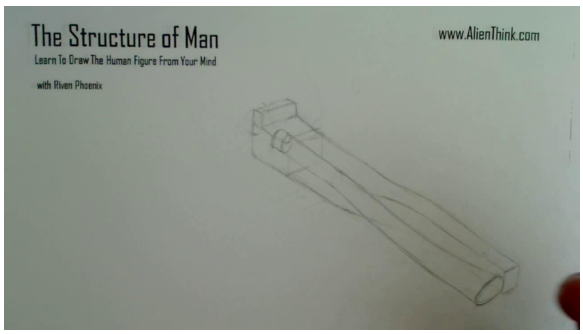
1		Hey guys, my name is Riven Phoenix and welcome to the Structure of Man Learn to Draw the
2		Human Figure from your Mind Training Course.
3		Okay, so in the previous lesson we looked at really the three-dimensional understanding that
4		we needed about the ulna and the radius.

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5		So now we're going to look at the formulas so we can even progress how to be able to draw
6		this.
7		Okay, so to start out what we're going to do is just basically draw out our long rectangle
8		that's going to go down in this way over here, just about here, and then here we'll do

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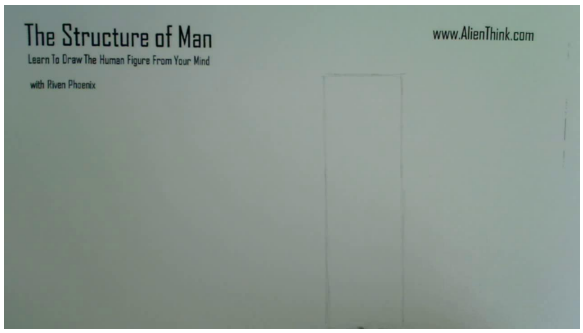
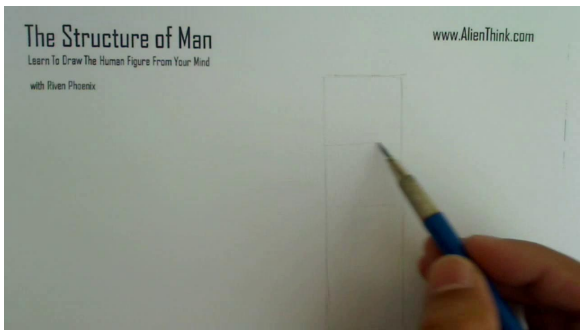
9		this one over here, right?
10		So this is going to be the forearm now.
11		Basically it's going to follow the same concept as before as we did for the humors.
12		Well, we're just going to divide it up like this, right?

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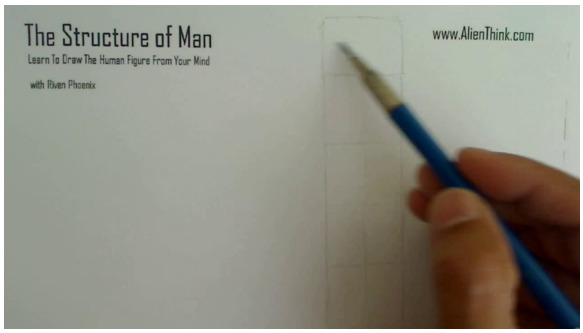
13		So in here we'll just make a center line to understand, right?
14		So over here I'm just going to add on top just this piece over here coming from the humors
15		bone over here so we can understand this, right?
16		So this part, we already knew that if you go back to our ideas, right, when we're going

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17		it out, we're going to get this nice over here, right?
18		So this is an important point on the humors that this is the funny bone area, right?
19		And over here we're just going to get a bigger version of this and we knew that this is
20		just going to go up over here about its business going upwards.

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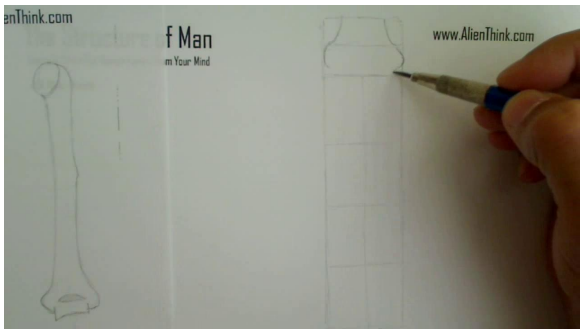
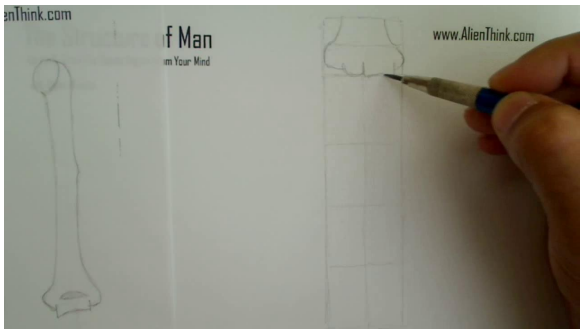
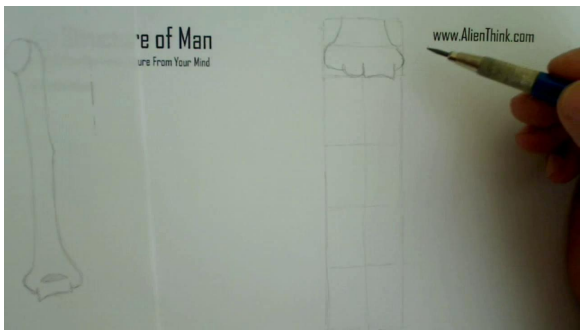
21		Over here we had stated that, okay, you're going to get like this idea here, you're going
22		to get this and it's just going to come over here, right?
23		It's a very basic conceptual idea.
24		So to understand about the radius and the ola is that we're now going to take a look

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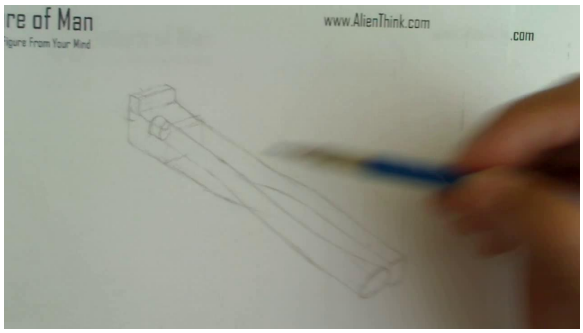
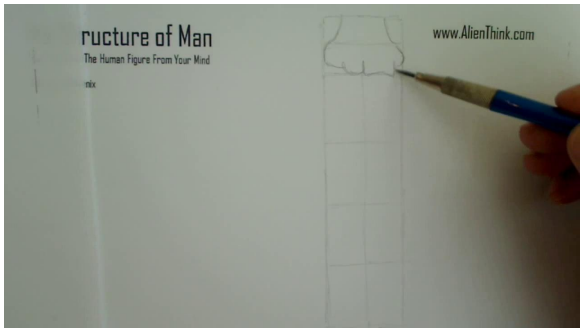
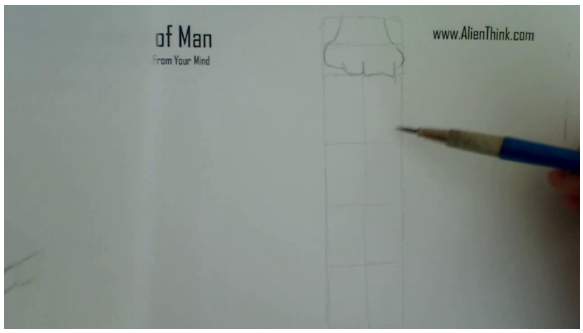
25		at this and see how it will work.
26		Well basically all we need to do is now understand, okay, well, look at how we have designed
27		it originally, we really just put it over here, right, knowing that the back end of this
28		is going to be going much more up, right?

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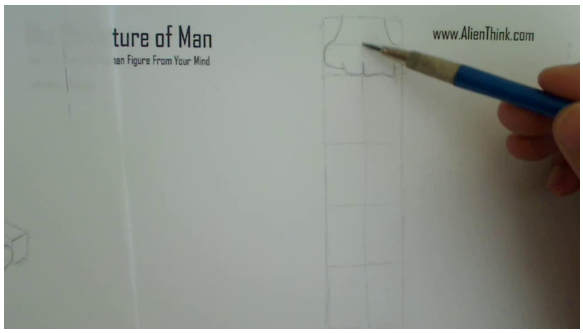
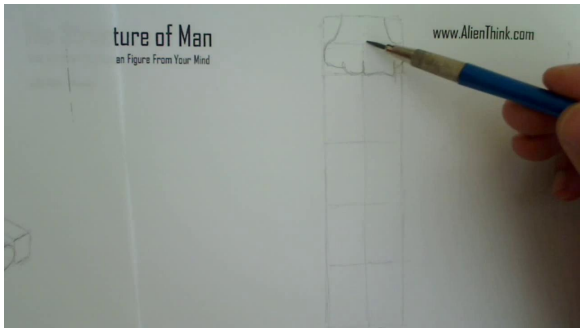
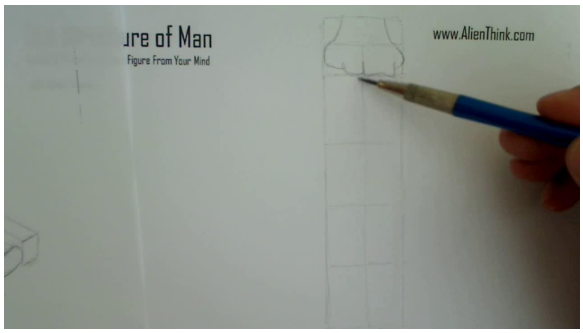
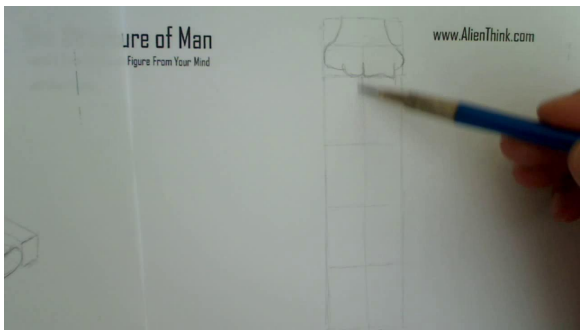
29		It has to feed into it, right?
30		Just understand that it has to feed into it and then it's going to basically come down
31		over here.
32		So it's going to be just like this coming down over here and then when it gets over

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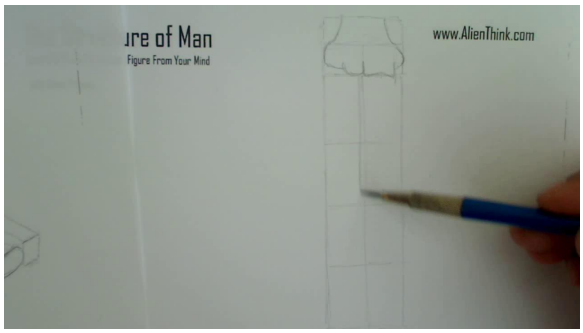
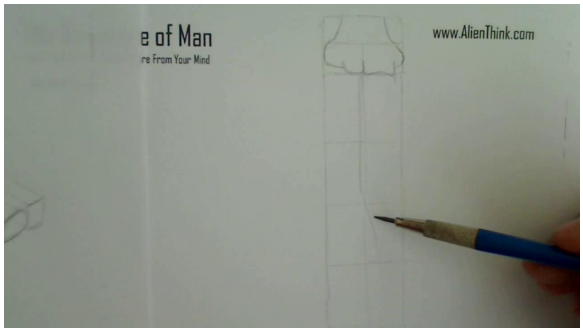
33		here we said that we're going to turn it in just like this, right?
34		We're going to turn it in and when it stops it's going to stop a little bit above over
35		here.
36		It's not going to go all the way down, okay?

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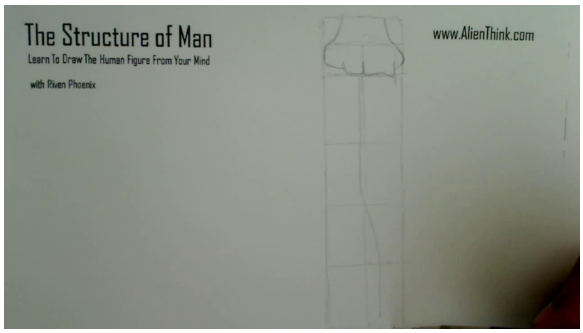
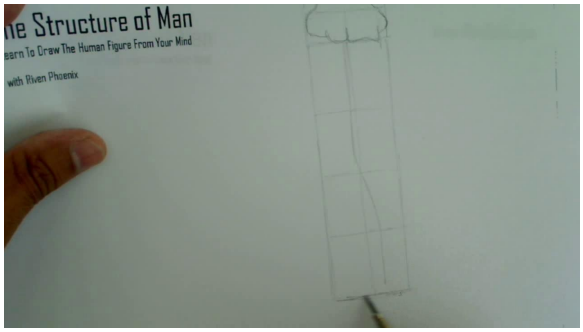
37		This is the end or see where I'm going, it's actually edged up to the camera here.
38		So I'm just going to draw that here so you can see it is right there where my pencil is.
39		We're going to just draw it like this and this is just going to come in this way over
40		here and it's going to turn and go like this, right?

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41		So this is the most basic concept to understand just knowing that over here inside here and
42		the back of it is where you're basically getting that nut here where this all nice going
43		to be feeding, right?
44		So we know from the previous drawing over here, this is where we have to now start to

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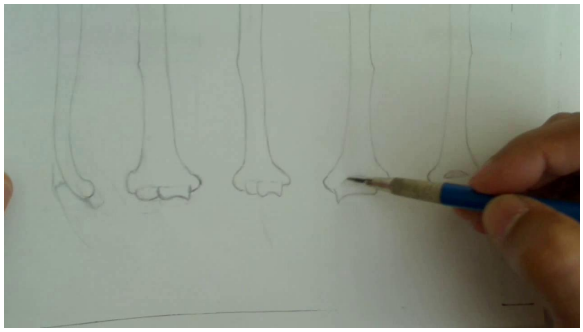
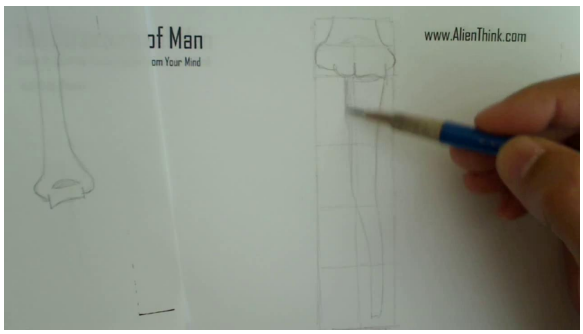
45		think about our invention a little bit more.
46		We know that this here where we put it, we kind of like put it in the center, right?
47		So meaning that this guy here really should be coming a little more, kind of like this
48		a little wider over here, right?

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49		Conceptually just understanding this part, okay?
50		So here we can now get that bone across, right?
51		It's very easy.
52		So we're just going to do it this way knowing that it comes up a little bit over here.

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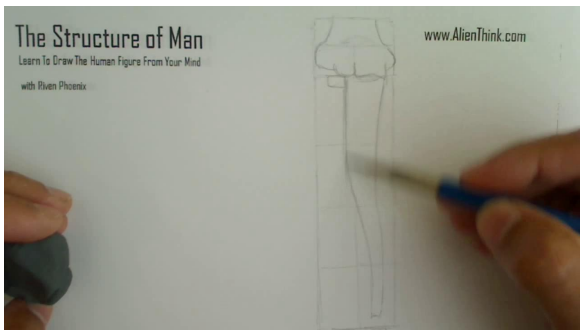
53		So the radius is going to be very simple.
54		It's obviously going to be sitting over here, right?
55		And the radius we said is you're going to get like the cylinder shape and then this
56		cylinder shape is now going to twist in a little bit and it's going to be like this,

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57		but now we're going to curve it in this way because it needs to become more wider, right?
58		So it's basically just going to be this way and then it's going to come this way.
59		Like this is the most basic idea we need to get from this.
60		So remember that this guy here is up against this here, right?

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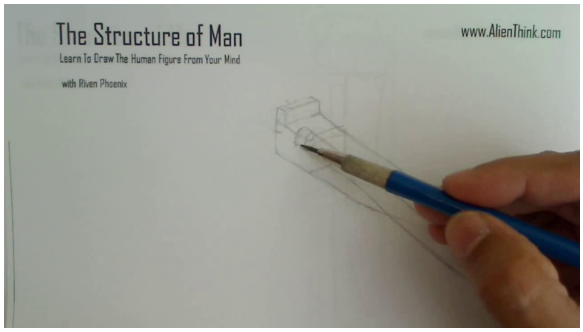
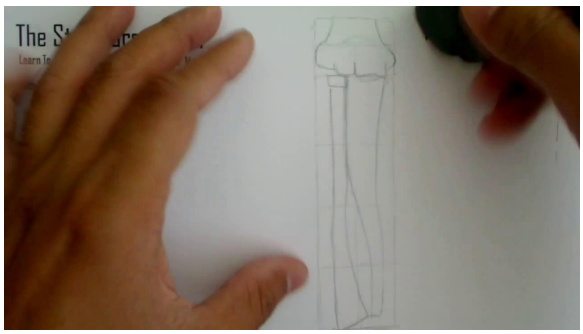
61		It is up here, right?
62		Against it and this is below.
63		So it's just over here, right?
64		So once we have this, we can now erase these lines over here and now create it in a much

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65		more nicer way that this is going to be the radius over here.
66		It's just going to go like this and this one here is coming this way and it's going to
67		go over here like this, right?
68		And this will help us to understand what's going on and this again over here going above

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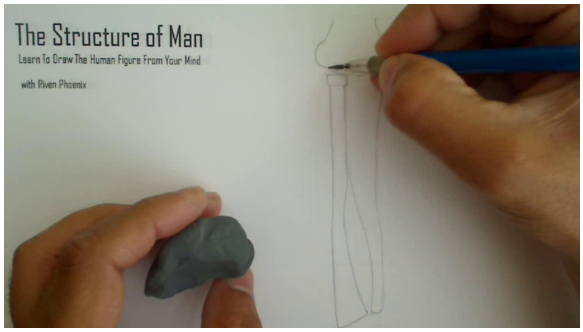
69		is the humorous bow.
70		Right?
71		So basically you're just going up against it, right?
72		So this area here, you can just imagine it's just going to be over here, right?

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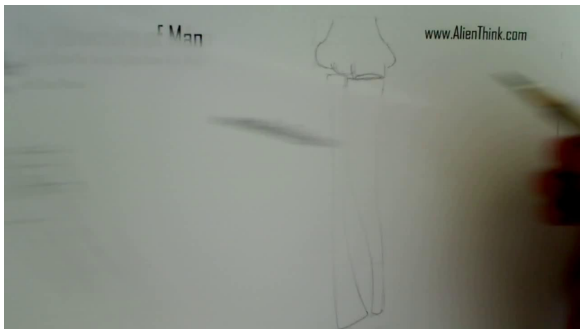
73		So what I'm talking about over here, this line is this, that it's this little nudge
74		that we put there on over here, right?
75		Because it has to be able to turn on this, it's going to be turning on this to get that
76		fluid motion.

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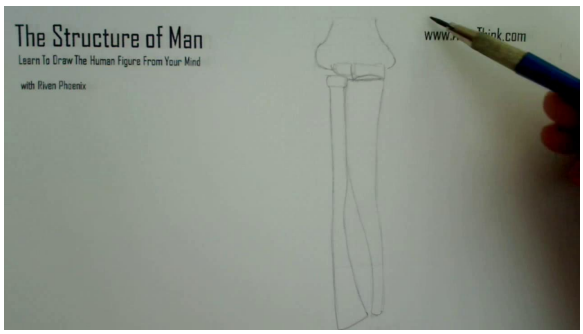
77		Okay, so since we have this done, what we can do now is start to look at the other part
78		of really the back view of the bone structure over here.
79		So for this, I'm going to just put it, I guess, right across here because we understand
80		like the bone structure would be here, right?

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81		So over here, let's say if we put it up against this over here, I'm going to go down
82		like this, going to go down here again like this, just understanding, you're just going
83		to flip the things around over here, right?
84		So basically what's going to happen is the, it's going to be flipped, right?

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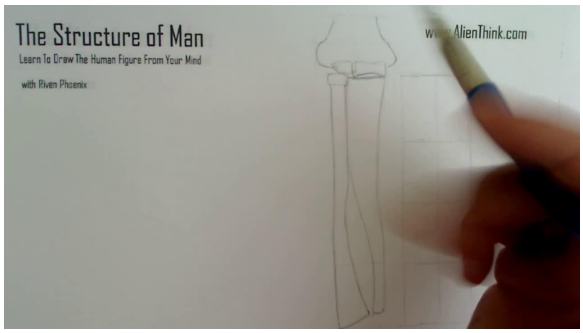
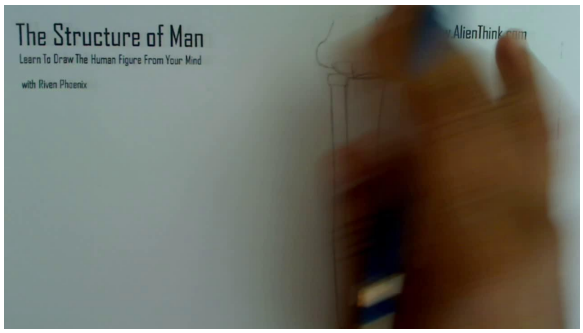
85		So now we're looking it from the back.
86		So in order for this to flip, what we need to do is first understand, okay, if this is
87		going to be flipped, we know that we're going to get that funny bone over here, it's going
88		to go this way, and then we're going to get that idea here that we talked about, it's

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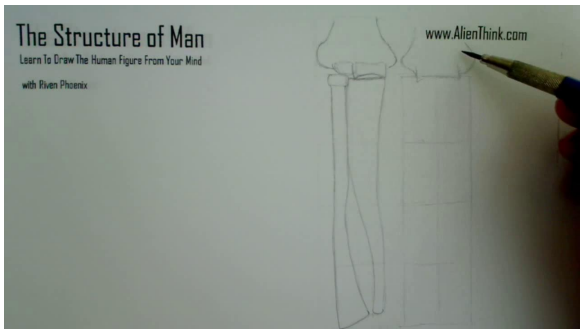
89		just going to be like this over here, and then it's going to go about its business over
90		here.
91		So this is the humorous fault.
92		So now what happens is now we can start to understand the ulna from here that really

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93		what it's was doing, it's trying to remember there's a, this thing here, this nut, right?
94		So this in this nut is going to be fitting over here, and it's going to go like this.
95		So it's basically over here in this side, but here we can see from the back.
96		So this is the design for where your elbow is going to be, right?

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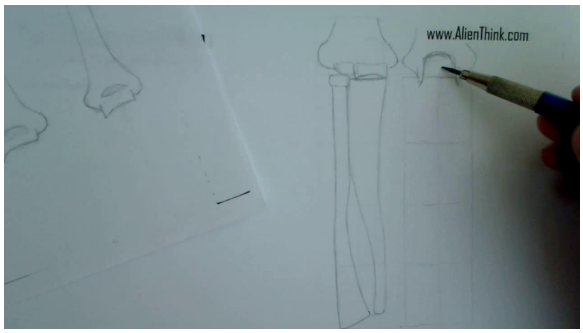
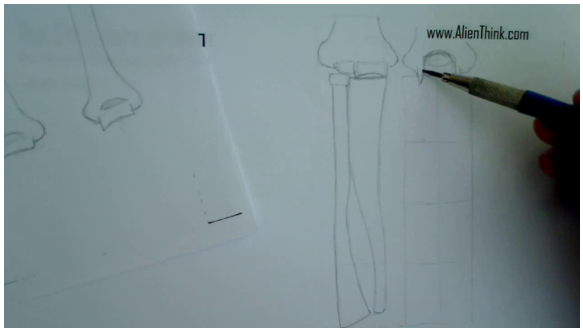
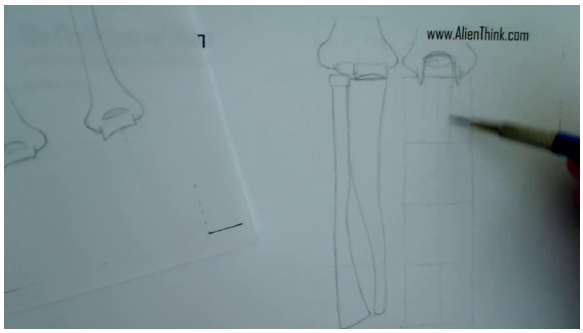
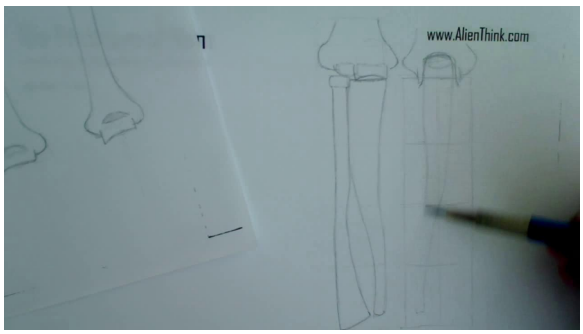
97		This is what causes the elbow, it's like you could put like this line here, right?
98		So this we know, okay, this makes sense, this is basically just going in this way over
99		here, and we know that it's just going to turn in again and go like this, right?
100		There's really nothing more to this than just understanding how this locking system is

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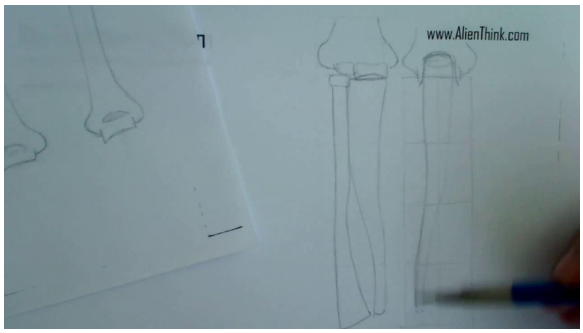
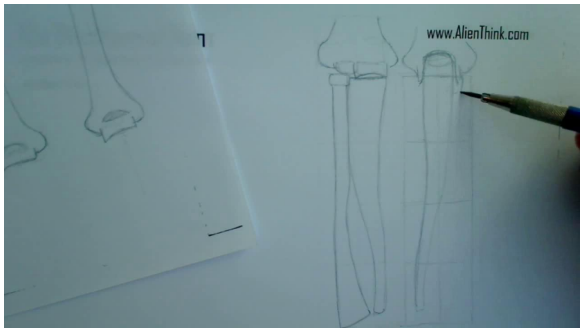
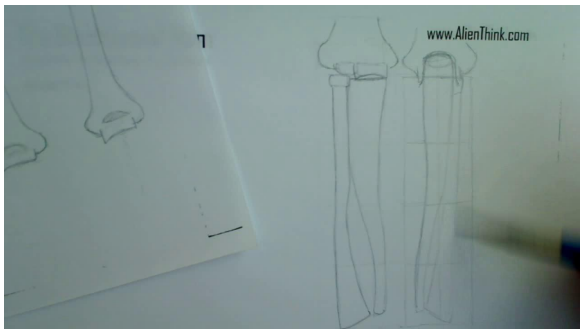
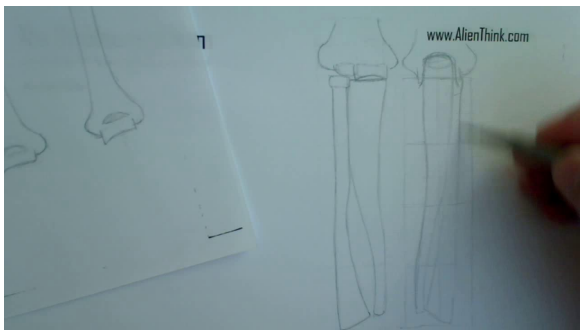
101		working, and then we know that on the other side, we can't really see too much of it is
102		the radius, and the radius is going to be again, nothing more than this going in this
103		way, and it's just going to come over here in this way, right?
104		So here you could come down in this way, and then make this guy go over here, and here

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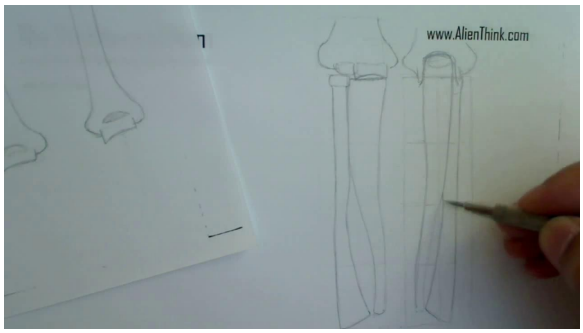
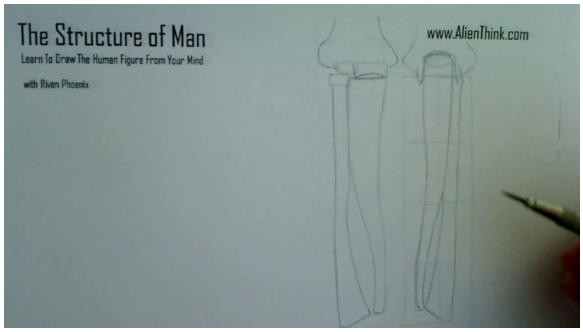
105		we can make it a little better in the design.
106		So I'm just going to erase some of these lines here just to get this concept understood.
107		Okay, so this is just going like this over here, and I'm going to get my ulna over here,
108		and then on that side here, I'm just going to get the radius felt, right?

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109		So this is the area that we were talking about that this is the outer, this is the funny
110		bone area, right?
111		And this is going to be an outer part, and because of that, the radius is inside, right?
112		It's on top of this, you're going to get that area here, that nudge that you see on the,

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113		right?
114		If the forearm muscles are going to be like this, right, your forearm muscles are going to
115		be going in this direction, you're going to get this nudge here in the forearm, and that's
116		what causes it.

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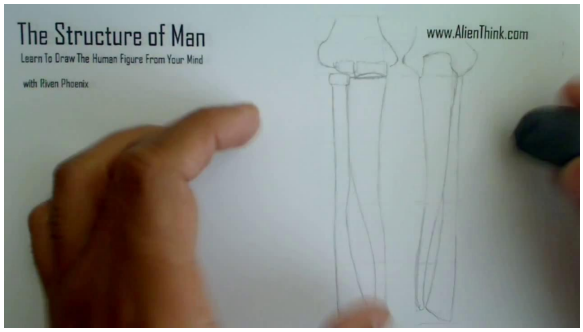
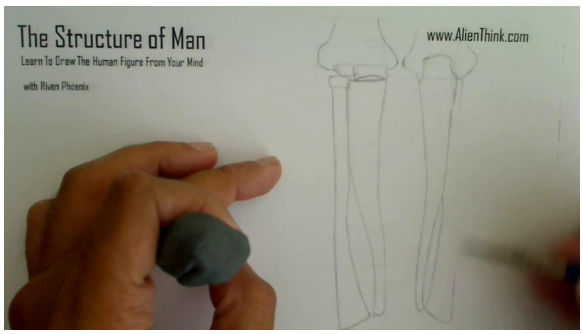
117		I'm just going to clean that up real quick, okay?
118		So now we understand how this is all working from that end, and I'm just going to clean
119		this up real quick.
120		Okay, so now let's just look at this of understanding it, or what would happen from the side, right?

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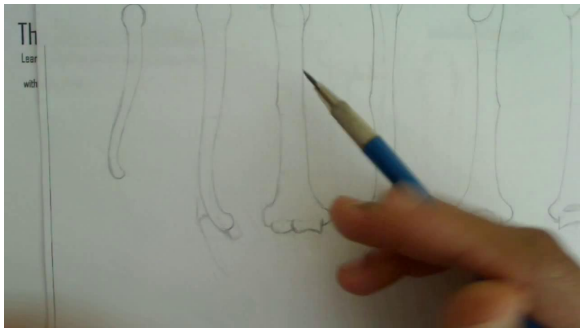
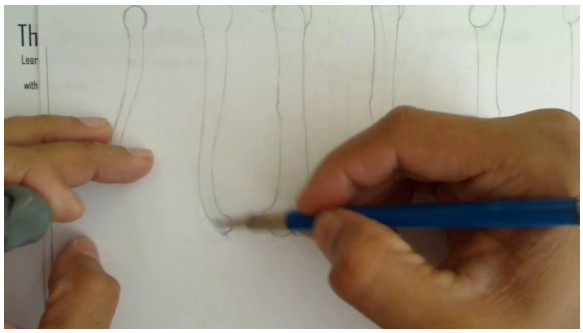
121		So really, to get that concept, here's the humerus bone that we have talked about, and
122		I put some additional designs here, I hope you don't understand this, basically we know
123		that the humerus bone is going to be like this, right?
124		So obviously, if we had to draw this out and say that, okay, let's say that this is going

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125		to be now my humerus bone going in this direction, I'm going to make it go this way.
126		Right, so it's going to go down this way, and then it's going to curve in and go this
127		way.
128		Right, all this should be, it's very simple to do freehand, we're going to get the humerus

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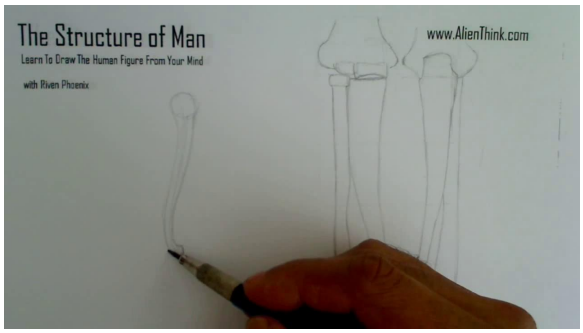
129		bone in this direction.
130		I say the arm, we're looking at the human figure from the side.
131		So if we now think about this, okay, I see, this is really the elbow over here, and this
132		is going to be my ulna, just going in this direction, right, because it has to be flat

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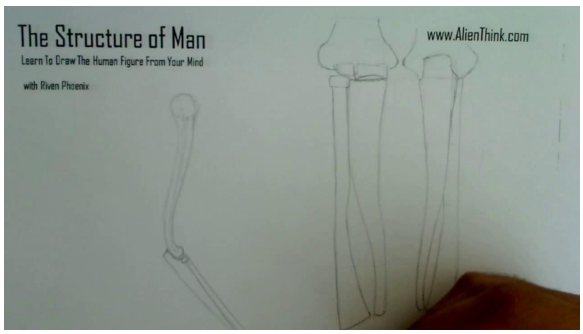
133		over here, right?
134		And then the bone over here, which is, the radius is going to now go down this way.
135		Right, depending on which way the hand is, obviously, this means that the thumb would
136		have to be here, it means that it would be like a palm system over here going in this

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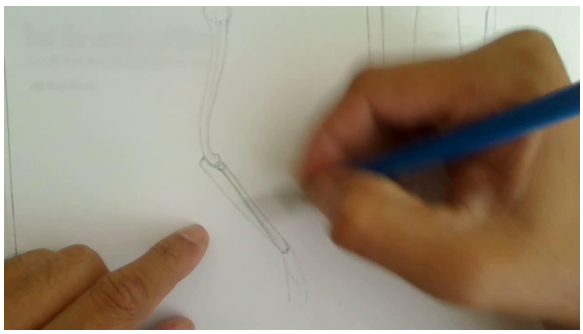
137		direction.
138		Okay, so here, to show you this a little more off, that's all that's going on over here.
139		Right, I got my radius over here, and it's just going to come down, I'm going to make
140		it like this.

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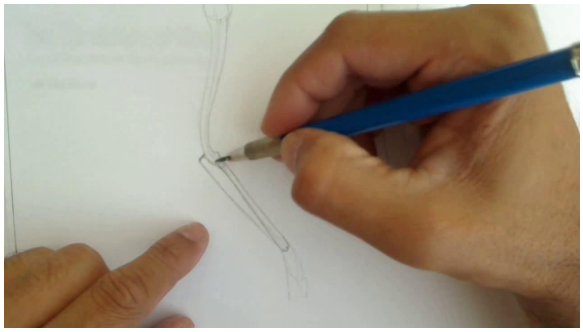
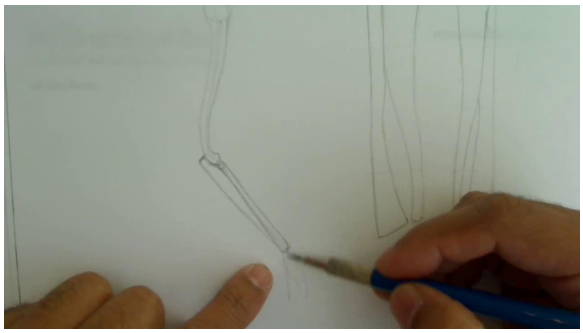
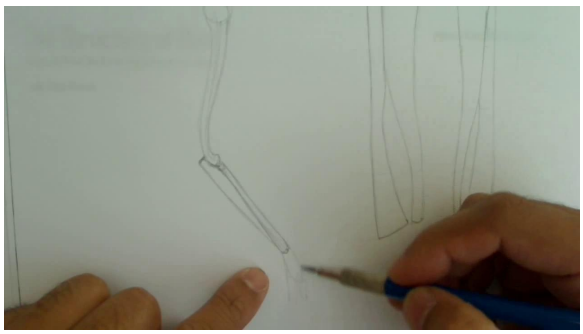
141		Right, it's a very simple concept to get, but understand about how the elbow system is
142		working, and this notch over here, right, you're going to get that when you put the muscles
143		on.
144		And this is, let's say, the palm of the hand going this way, and the arm is just going

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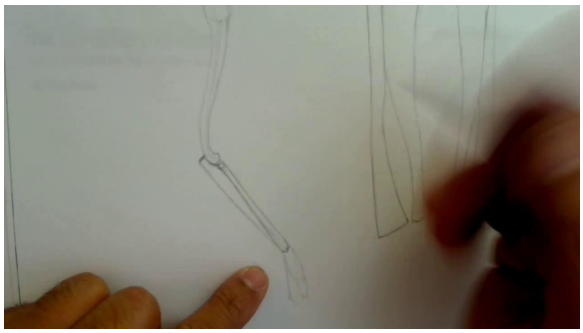
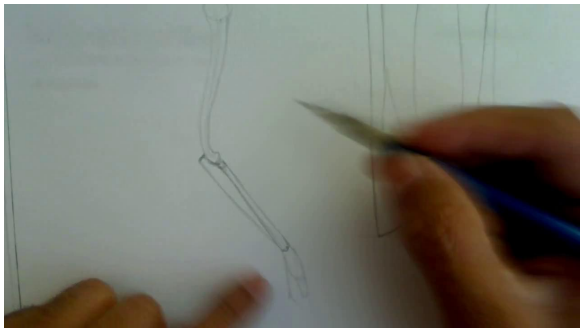
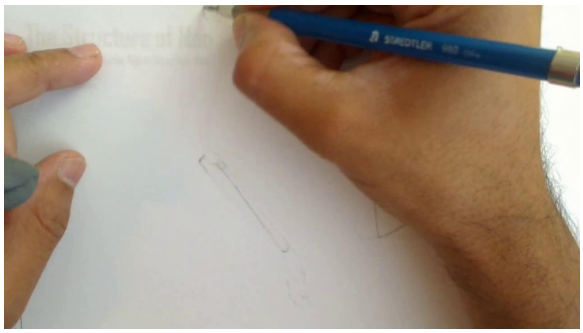
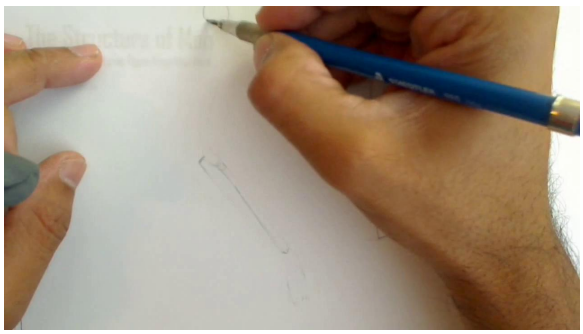
145		in this way, right, so the thumb would be on the side of the radius.
146		Okay, so here we can just clean this up a little bit and just begin to grasp this concept
147		here.
148		It's just over here, clean like this, right, I got my hammer and some bone, and over

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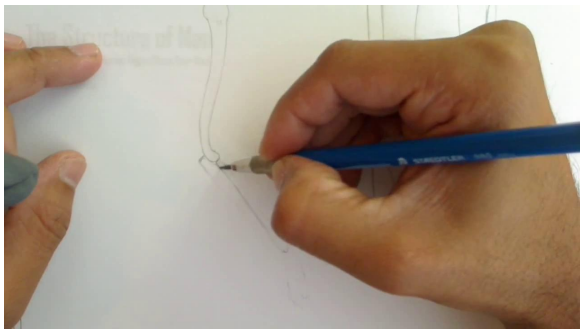
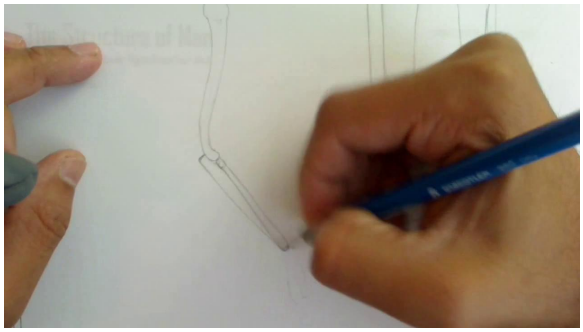
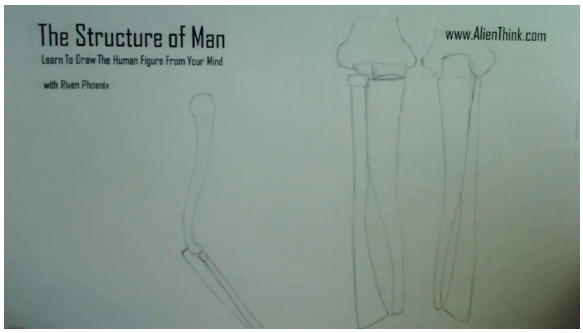
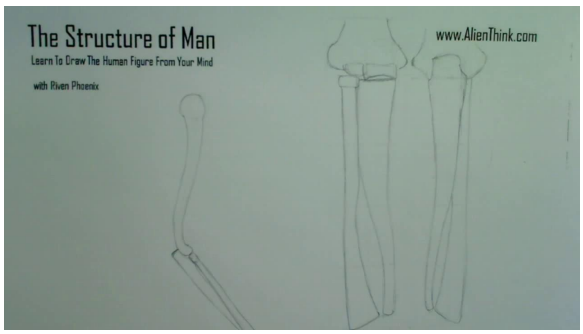
149		here, I'm going to get to radius, I am just going to make it like this, and over here,
150		this is going to be the elbow, moving in this direction, okay, okay, so I'll see you
151		in the next lesson.
152		Thanks.

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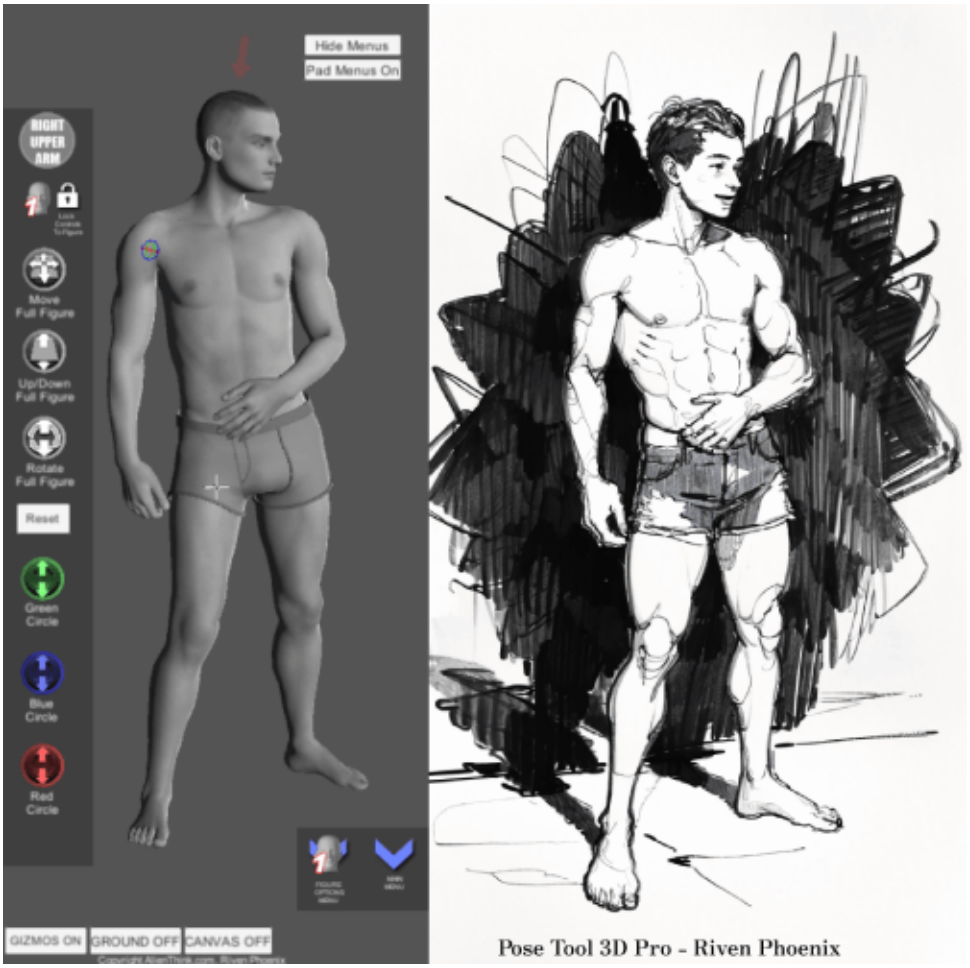

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